



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,901	01/24/2006	Peter Herring	DEHN-01005US0	7477
28554	7590	10/15/2010	EXAMINER	
Vierra Magen Marcus & DeNiro LLP 575 Market Street, Suite 2500 San Francisco, CA 94105				LIU, XUE H
ART UNIT		PAPER NUMBER		
1742				
MAIL DATE		DELIVERY MODE		
10/15/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/565,901

Filing Date: January 24, 2006

Appellant(s): HERRING, PETER

Richard A. Nebb
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9 July 2010 appealing from the Office action mailed 16 December 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 50-55 and 57-84 stand finally rejected in the Office Action dated September 11, 2009.

Claims 1-49, 56 and 85 have been previously cancelled, and claims 86-98 have been previously withdrawn as drawn to non-elected subject matter.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the

appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading “WITHDRAWN REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

Claims 50-51, 57, 61, 71-79 and 81-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterlow et al. (US 5,562,979) in view of Chu et al. (US 5,942,324).

Regarding claim 50, Easterlow et al. teach a method of forming a molding 11 by multiple injection molding, said method comprising: injecting a first material 23a into a mold 10; injecting a second material 24a into said mold behind said first material so that said first material covers a surface 14a of said mold, wherein the first material includes metallic or mineral flakes 40.

Easterflow et al teach that the process can be used to produce by injection molding various body components of a motor vehicle having a paint finish provided by the coating material 23 (abstract, figs. 1-9, col. 1, lines 14-19, col. 3, lines 59-67 to col. 4, lines 1-6, col. 5, lines 5-17, 28-33 and 64-67).

Easterflow et al. do not positively teach that the metallic or mineral flakes include magnetic particles.

However, it would have been obvious to one of ordinary skill in the art that both ferromagnetic metals or minerals and non-ferromagnetic metals or minerals can be added to the coating material since both ferromagnetic and non-ferromagnetic metals can be used to add a metallic finish to the coating.

Easterflow do not teach applying one or more magnetic fields to at least at portion of at least one of said materials so as to change the orientation and/or distribution of magnetic particles in at least one of said materials.

However, Chu et al. teach a coated exterior mirror housing for vehicles. Chu et al. teach that a plurality of particles or flakes of metal, mica or the like may be included in the coating; if made from a ferromagnetic metal, those particles may be oriented in a desired array using magnetic force prior to final set up or cure of the coating. Chu et al. further teach that the resinous polymeric materials from which housing is formed may also include particles or flakes of metal or mica as described above (col. 3, lines 19-29 and col. 8, lines 7-19). Chu et al. also teaches that the magnetic field changes the orientation and/or distribution of all of said magnetic particles in order to give a desired visual effect in the coating layer of the molding (col. 8, lines 7-14).

It would have been obvious to one of ordinary skill in the art to provide ferromagnetic metal particles in the coating material as taught by Chu et al. in the injection molding method of Easterflow et al. since Chu et al. teach that the magnetic particles can be oriented uniformly within the coating by a magnetic force to thereby enhance the appearance and metallic effect from the particles (col. 8, lines 7-14).

Regarding claim 51, Easterflow et al. teach that the second material is injected into the mold before said first material has cured completely (col. 3, lines 59-67 to col. 4, lines 36).

Regarding claim 57, Chu et al. teach that the magnetic fields orientate and/or distribute the magnetic particles substantially uniformly (col. 8, lines 7-14).

Regarding claim 61, Chu et al. teach that the particles are oriented in a desired array using magnetic force prior to final set up or cure of the coating layer (col. 3, lines 26-29 and col. 8, lines 7-11).

Regarding claim 71, Easterflow et al. teach that the metallic or mineral particles 40 have an elongated, non-spherical shape (see fig. 7).

Regarding claims 72-79, Chu et al. do not positively teach that the magnetic particles comprise about 2% of the weight of at least one of said materials.

However, it would have been obvious to one of ordinary skill in the art to use a small amount of magnetic particles in the molding materials since increasing the amount of magnetic particles in the molding materials increases the composition viscosity, reduces the fluidity, making the molding difficult and bubble inclusion inevitable so it is not appropriate. Additionally, it would have been obvious to vary the amount of metal particles to obtain the desired appearance and color of the molded part.

Regarding claims 81-82, Easterflow et al. teach that the coating material is injected into the mold while the mold is at a temperate in a range of 20°C to 100°C (col. 3, lines 59-61).

Regarding claim 83, Easterflow et al. teach that the molding is partially cured in the mold and is heated until completely cured after removal from the mold (col. 4, lines 25-27, col. 4, lines 64-67).

Regarding claim 84, while the combined teachings of Easterflow et al. and Chu et al. do not positively suggest applying one or more further magnetic fields to the molding after it has been removed from the mold, it would have been obvious to one of ordinary skill in the art to do so to modify the orientation of the magnetic particles since they can still be oriented by a magnetic field while the molding is not completely cured to obtain the desired appearance or color of the molded part.

Claims 52-55 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow in view of Chu et al. as applied to claim 50 above, and further in view of Spain et al. (US 6,579,397).

Regarding claim 52, Easterflow et al. do not teach injecting at least a third material into said mold after said second material is injected. However, Spain et al. teach a paint coat 44 for the exterior surface of a molded plastic car body member or panel 118 which includes an exterior clear coat 45 above a color coat 46 (abstract, fig. 4 and col. 8, lines 25-55). It would have been obvious to one of ordinary skill in the art to inject a third material into the mold after the second material is injected into the mold in the injection molding process of Easterflow et al. in order to mold a coating layer with multiple layers as taught by Spain et al. since Spain et al. teach that it's

advantageous to provide a clear coat layer as the clear coat layer can provide the majority of the durability, gloss, and other appearance properties necessary for use as an exterior automotive paint coat (col. 5, lines 46-57).

Regarding claim 53, since Easterflow et al. teach that the second material is injected into the mold before said first material has cured completely to ensure good bonding between the two layers (col. 3, lines 59-67 to col. 4, lines 1-24), therefore it would have been obvious to one of ordinary skill in the art to inject the third material into the mold before said second material has cured completely to ensure good bonding of the second material and the third material in view of the teaching of Easterflow et al.

Regarding claim 54, as stated above in paragraph 9 regarding claim 50, the combined teachings of Easterflow et al. and Chu et al. teach that the first material comprises magnetic particles.

Regarding claim 55, Easterflow et al. do not teach that the first and/or second and/or third material is substantially translucent or transparent. However, Chu et al. teach that the coating material is generally transparent (abstract, col. 2, lines 25-32 and 50-55, col. 5, lines 46-57, col. 8, lines 20-31). It would have been obvious to one of ordinary skill in the art to provide the teaching of Chu in the injection molding process of Easterflow et al. since Chu et al. teach that the transparent coating increases gloss and depth of color in appearance (col. 2, lines 25-32, col. 5, lines 46-57).

Regarding claim 80, since the third material that forms the clear coat layer as taught by Spain et al. does not contain any magnetic particles, the third material and the first or second materials clearly comprise different weight percentages of magnetic particles.

Claims 50-51, 57, 61, 71-79 and 81-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. and Kashiwagi et al. (EP 0556449).

Regarding claim 50, Easterlow et al. teach a method of forming a molding 11 by multiple injection molding, said method comprising: injecting a first material 23a into a mold 10; injecting a second material 24a into said mold behind said first material so that said first material covers a surface 14a of said mold, wherein the first material includes metallic or mineral flakes 40. Easterflow et al teach that the process can be used to produce by injection molding various body components of a motor vehicle having a paint finish provided by the coating material 23 (abstract, figs. 1-9, col. 1, lines 14-19, col. 3, lines 59-67 to col. 4, lines 1-6, col. 5, lines 5-17, 28-33 and 64-67).

Easterflow et al. do not positively teach that the metallic or mineral flakes include magnetic particles.

However, it would have been obvious to one of ordinary skill in the art that both ferromagnetic metals or minerals and non-ferromagnetic metals or minerals can be added to the coating material since both ferromagnetic and non-ferromagnetic metals can be used to add a metallic finish to the coating.

Easterflow do not teach applying one or more magnetic fields to at least at portion of at least one of said materials so as to change the orientation and/or distribution of magnetic particles in at least one of said materials.

However, Chu et al. teach a coated exterior mirror housing for vehicles. Chu et al. teach that a plurality of particles or flakes of metal, mica or the like may be included in the coating; if

Art Unit: 1791

made from a ferromagnetic metal, those particles may be oriented in a desired array using magnetic force prior to final set up or cure of the coating. Chu et al. further teach that the resinous polymeric materials from which housing is formed may also include particles or flakes of metal or mica as described above (col. 3, lines 19-29 and col. 8, lines 7-19). Chu et al. also teaches that the magnetic field changes the orientation and/or distribution of all of said magnetic particles in order to give a desired visual effect in the coating layer of the molding (col. 8, lines 7-14). It would have been obvious to one of ordinary skill in the art to provide ferromagnetic metal particles in the coating material as taught by Chu et al. in the injection molding method of Easterflow et al. since Chu et al. teach that the magnetic particles can be oriented uniformly within the coating by a magnetic force to thereby enhance the appearance and metallic effect from the particles (col. 8, lines 7-14). While Chu et al. teach changing the orientation and/or distribution of all of the magnetic particles in order to give a desired visual effect in the coating layer of the molding, Kashiwagi et al. teach a method for making a painted product with magnetically formed pattern by using a paint medium containing magnetic bodies which are oriented by a magnetic force to form the desired pattern to be formed on the painted product (page 2, lines 5-10, page 3, lines 14-28, page 13, lines 37-41 and claim 12). It would have been obvious to incorporate the teaching of Kashiwagi et al. in the injection molding method of Easterflow et al. and Chu et al. since it would be desirable to form patterns on a vehicle body to enhance the aesthetic appearance of the product.

Regarding claim 51, Easterflow et al. teach that the second material is injected into the mold before said first material has cured completely (col. 3, lines 59-67 to col. 4, lines 36).

Regarding claim 57, Chu et al. teach that the magnetic fields orientate and/or distribute the magnetic particles substantially uniformly (col. 8, lines 7-14).

Regarding claim 61, Chu et al. teach that the particles are oriented in a desired array using magnetic force prior to final set up or cure of the coating layer (col. 3, lines 26-29 and col. 8, lines 7-11).

Regarding claim 71, Easterflow et al. teach that the metallic or mineral particles 40 have an elongated, non-spherical shape (see fig. 7). Kashiwagi et al. also teach that the magnetic particles are non-spherical shape (page 3, lines 1-28 and claim 12).

Regarding claims 72-79, Chu et al. do not positively teach that the magnetic particles comprise about 2% of the weight of at least one of said materials. However, it would have been obvious to one of ordinary skill in the art to use a small amount of magnetic particles in the molding materials since increasing the amount of magnetic particles in the molding materials increases the composition viscosity, reduces the fluidity, making the molding difficult and bubble inclusion inevitable so it is not appropriate. Additionally, it would have been obvious to vary the amount of metal particles to obtain the desired appearance and color of the molded part.

Regarding claims 81-82, Easterflow et al. teach that the coating material is injected into the mold while the mold is at a temperate in a range of 20°C to 100°C (col. 3, lines 59-61).

Regarding claim 83, Easterflow et al. teach that the molding is partially cured in the mold and is heated until completely cured after removal from the mold (col. 4, lines 25-27, col. 4, lines 64-67).

Regarding claim 84, while the combined teachings of Easterflow et al. and Chu et al. do not positively suggest applying one or more further magnetic fields to the molding after it has

been removed from the mold, it would have been obvious to one of ordinary skill in the art to do so to modify the orientation of the magnetic particles since they can still be oriented by a magnetic field while the molding is not completely cured to obtain the desired appearance or color of the molded part.

Claims 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. as applied to claim 50 above, and further in view of Jarrard (US 6,106,759).

Regarding claim 58, Chu et al. do not teach that the strength of said magnetic fields is varied with time. However, Jarrard teaches controlling the orientation of magnetic particles during injection molding by imparting a variable magnetic field strength in the mold cavity (abstract, col. 1, lines 14-31, col. 3, lines 19-36). Therefore it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Jarrad in the injection molding method of Easterflow et al. since Jarrad teaches that varying the strength of the magnetic field controls the orientation of the magnetic particles.

Regarding claim 59, Jarrad teaches using an electromagnet to orient the magnetic particles (col. 1, lines 14-31, col. 3, lines 7-36). Jarrad does not teach the strength of the magnetic fields is varied by varying the power delivered to the electromagnet with time. However, it would have been obvious to one of ordinary skill in the art to vary the power delivered to the electromagnet with time since it would achieve the desired effect of modifying the strength of the magnet field.

Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. as applied to claim 50 above, and further in view of Wagner et al. (US 6,000,922).

Regarding claim 60, Easterflow et al. and Chu et al. do not teach that the strength and/or location of said magnetic fields is varied with time by moving one or more permanent magnets or electromagnets relative to said mold. However, Wagner et al. teach adjustably moving a permanent magnet relative to a mold to efficiently adjust the magnetizing position of the permanent magnet for inducing relatively precise magnetic development fields in a molding material molded within the molding cavity (abstract, col. 4, lines 1-15, col. 7, lines 36-53 and col. 9, lines 21-24). Therefore it would have been obvious to one of ordinary skill in the art to provide the teaching of Wagner et al. in the injection molding method of Easterflow et al. and Chu et al. to induce precise magnetic field in the molding material as taught by Wagner et al.

Claims 62-66 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. as applied to claim 50 above, and further in view of Phillips et al. (WO2002/090002).

Regarding claim 62, Chu et al. do not positively teach that the magnetic particles comprise nickel. However, Phillips et al. teach a method for producing imaged coated articles by applying a magnetic field to magnetic pigments to alter the orientation of selected magnetic particles. Phillips et al. teach that the magnetic particles can be formed of any magnetic material such as nickel (see abstract, page 13, lines 19-21). Therefore it would have been obvious to one of ordinary skill in the art to use nickel as the magnetic particles since Phillips et al. teach that nickel is a suitable material that can be oriented by a magnetic field.

Regarding claim 63, Phillips et al. do not positively teach using leafing grade nickel flakes. However, it would have been obvious to one of ordinary skill in the art to use leafing grade nickel flakes so that these particles will be visible in the outside surface to enhance the appearance and metallic effect of the coating layer in the inventions of Easterflow et al. and Chu et al.

Regarding claim 64, Phillips et al. teach that the magnetic particles comprise a core and an outer coating (page 13, lines 3-18).

Regarding claim 65, Phillips et al. teach that the core is a magnetic material (page 13, lines 3-18).

Regarding claim 66, Phillips et al. teach that the coating is aluminum (page 13, lines 3-14).

Regarding claim 68-69, Phillips et al. teach that the magnetic particles may be selected for its reflecting or absorbing properties (page 13, lines 31-32).

Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. and Phillips et al. as applied to claim 64 above, and further in view of Kiichi (English abstract of JP 01-259916).

Regarding claim 67, Phillips et al. do not teach that the coating is colored. However, Kiichi teaches a coloring material 1 for molding is constituted of a magnetizing material 2, around which a coloring pigment 3 is coated and integrated thereon (see figs. 1-2 and English abstract). It would have been obvious to one of ordinary skill in the art to incorporate Kiichi's teaching in the combined teaching of Easterflow et al., Chu et al. and Phillips et al. to further enhance the appearance of the coating layer.

Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Easterflow et al. in view of Chu et al. as applied to claim 50 above, and further in view of Blume (2003/0189475).

Regarding claim 70, Chu et al. do not positively teach that the magnetic particles are substantially spherical. However, Blume teaches that due to the regular, spherical shaped of magnetic particles, the particles are coated more effectively than the irregular crushed ribbon particles and further teaches that spheres do not have a tendency to fracture (paragraph 13). It would have been obvious to one of ordinary skill in the art to use spherical magnetic particles in the coating layers of Easterflow et al. and Chu et al. since Blume teaches the benefits of using spherical particles.

(10) Response to Argument

Appellants present the following arguments:

- A. the cited prior art combinations are improper since the Examiner failed to properly consider the differences between the claim and the prior art, used impermissible hindsight reasoning, and since the references teach away from each other; and
- B. Claim 50 is not obvious from the cited prior art combinations.

The Examiner finds appellant's arguments not persuasive for the following reasons:

Regarding argument A, appellants argue on pages 5 and 6 that although the prior art references are generally relevant in that they all deal with applying a finish to a molded article, there are significant differences between claim 50 and the prior art that have not been properly

considered by the Examiner. Appellants points out that in determining the differences between the claimed invention and the prior art, the question is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. Appellants further argue that the Examiner has failed to properly consider the claim as a whole, but instead, has taken known elements from different prior art references and asserted it would be obvious to combine them. In doing so, appellants allege that the Examiner has applied impermissible hindsight reasoning (see appellant's remark, pages 5-6). Appellants then cite the Examiner's statement that "Chu is only relied on for teaching that magnetic particles can be oriented using magnetic force. One of ordinary skill in the art at the time of the invention would have realized that the teaching of Chu can be applied to any molding process including injection molding, and is not restricted to spray coating processes only" and argues that this statement reflects the failure to consider the claimed invention as a whole (see appellant's remark, page 6). The Examiner acknowledges that Chu's teaching is generally directed to using magnetic force to orient metallic particles in a spray coating process. However, Chu also teaches that in addition to adding metallic flaks to the coating material, the molded resinous plastic material of the housing may itself include a plurality of particles or flakes or material mixed therein prior to molding such that those particles will be visible in the outside surface after molding for enhancement by the generally transparent coating (see col. 2, ll. 50-67). Chu further teaches that coating 61 with particles or flakes 62 may be used with resinous polymeric materials from which housing 12 is formed which themselves may include particles or flakes of metal or mica as described above. In such case, the particle containing coating 61 will further enhance the metallic effect of the metallic appearance of the housing 12 (see Chu's specification, col. 8, ll. 1-19). Therefore, it

would have been obvious to one of ordinary skill in the art at the time of the invention to apply Chu's teaching of applying magnetic force to resinous polymeric materials to orient ferromagnetic particles contained therein to the molding process of the housing 12 as well.

Appellants continue to argue that neither Chu nor Kashiwagi may be properly combined with Easterlow (see appellant's remark, page 6). Specifically, appellants argue on page 7 that there is no teaching or suggestion within Easterlow of using a magnetic field to manipulate and orient the metal flakes, as acknowledged by the Examiner. According to appellant's arguments, Easterlow teaches that the metallic particles are generally aligned simply by the flow of material into the mold (see Appeal Brief, page 7). Appellants thus draw the conclusion that the Examiner has drawn an erroneous conclusion based on the description in Easterlow that the flow of injected materials causes the metallic flakes to lie generally in a plane parallel with the flow by placing undue emphasis on the word "generally" (see Appeal Brief, page 7). Appellants then cite Easterlow's teaching that "the method in accordance with the invention produces surprisingly good results when a metallic finish is required... [and] provides the required orientation for an acceptable metal finish" on the same page to support the appellants' position that it would not have been obvious for one of skill in the art to further align the metallic particles using the magnetic filed disclosed in Chu. However, appellant's own specification discloses as with the injection molding techniques discussed above regarding GB2280401, which is the US equivalent of Easterlow (US, 5,562,979), wherein a single material is injected into the mold, the surface appearance of a product produced by dual injection molding is also affected by weld lines and is highly dependent upon the profile of the inner surface of the mold. Furthermore, molds having irregular or discontinues inner surfaces cause the flow of the first

Art Unit: 1791

coating across the surface of the mold to be distorted, thus resulting in the first outer coating of the molding having a distorted appearance (see appellant's own specification, paragraphs 7-8).

Therefore, appellants acknowledge that with the injection method of Easterlow, the surface appearance of the molding is affected by weld lines and non uniform flow lines, etc.

Furthermore, it would have been obvious to one of skill in the art to orient the metallic particles using the magnetic field as disclosed by Chu in the method of Easterlow in addition to aligning the particles by the flow of the material alone since the magnetic orientation of metallic particles is beneficial such as in forming particular patterns for aesthetic purposes.

The appellant's arguments on page 8 is similarly drawn to appellant's statement that neither Chu nor Easterlow recognize a need to reorient metal particles in a dual injection molding coating process such as described above, and further adds that neither of the references provides any motivation to use magnetic particles in the injection process of Easterlow, i.e., metal particles of the type that can be manipulated by a magnetic field. Appellants insist that the only requirement in Easterlow is that the metal particles provide a metallic appearance. The Examiner agrees that Easterlow does not disclose the use of magnetic particles. However, Chu teaches that while the metal flakes may be aluminum, other ferromagnetic metals may be used such that the flakes can be oriented in a predetermined pattern such as parallel to the housing surface using magnetic force prior to final curing of the transparent coating (see Chu, col. 2, ll. 50-67, col. 8, ll. 1-20 and col. 3, ll. 25-30). Easterlow teaches metal particles, which naturally include magnetic particles as well; therefore, one skilled in the art would have found it obvious to use magnetic particles as opposed to non magnetic particles in the molding process of

Art Unit: 1791

Easterlow since Chu teaches that magnetic particles may be oriented by magnetic fields in a shaped article to give a desired visual effect.

Appellants further argues on page 9 of the Appeal Brief that since a specific object of Easterlow was to render unnecessary the subsequent painting of the molding or molded component, thus the references teach away from each other and are not properly combined. The Examiner disagrees for the following reason: the combination of Easterlow and Chu is to modify the molding process of Easterlow with the magnetic orientation of particles of Chu, rather than applying the spray coating technique in the in-mold coating process of Easterlow. It is not clear how are two references teach away from each other, since the references are properly combined as long as there is some motivation found either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

Appellants argue on the same page that none of the references of Easterlow, Chu, or Kashiwagi recognized that magnetic particles could be injected into the mold and then magnetically manipulated within the mold to achieve a desired visual appearance. However, Chu discloses that the magnetic force is applied to the coating prior to final cure or set up of the coating 61 so as to orient the particles uniformly within the coating (see col. 8, ll. 1-20). Furthermore, Chu teaches that the molded resinous plastic material of the housing may itself include a plurality of particles or flakes of material mixed therein prior to molding such that those particles will be visible in the outside surface after molding for enhancement by the

Art Unit: 1791

generally transparent coating (see col. 2, ll. 63-67). Therefore, the combination of Easterlow and Chu teaches that the magnetic particles are oriented before the final cure or set up of the molding material, in other words, the magnetic particles would be magnetically manipulated within the mold so that the particles can be oriented while the molding material is still flowable.

Appellants again argue on page 9 of the Appeal Brief that the metallic flakes of Easterlow are already well oriented by the flow of injected material, thus there is not need to use the magnetic field disclosed in Chu to achieve some particular orientation for a desired visual effect. This argument is already rebutted above and is not repeated here.

Finally, appellants argue that while Spain does disclose three layers of coatings, none of the layers includes magnetic particles. Claim 80 recites that "wherein said first and second or third materials comprise different weight percentages of magnetic particles. While Spain does teach that the composition of individual layers may be different, appellants argue that such teachings relates to the effectiveness and performance of the chemical composition, and not to the ability to orient magnetic particles within the composition. Appellants conclude that there is no basis for stating that Spain would make obvious a three layer coating, wherein at least two of the three layers have different percentages of magnetic particles. It is believed that the appellants misinterpreted the Examiner's rejection in the Office Action to mean that Spain alone teaches a three layer coating wherein the first and second or third materials comprise different weight percentages of magnetic particles. However, it is clear that the first and second materials are taught by Easterlow as discussed in the rejection of claim 50, from which claim 80 depends. Spain is cited for the teaching of a third layer. Claim 52 from which claim 80 directly depends recites a third material is injected into said mold after said second material is injected. Claim 52

Art Unit: 1791

does not recite that the third material contains magnetic particles. In the combination of the prior art references, at least two of the three layers have different weight percentages of magnetic particles because Easterlow in view of Chu teaches that one of the first and second layers includes magnetic particles, while Spain teaches the third layer which does include magnetic particles.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/X. L./

Examiner, Art Unit 1791

20 September 2010

Conferees:

/KAT WYROZEBSKI/
Supervisory Patent Examiner, Art Unit 1791

/Christopher A. Fiorilla/
Chris Fiorilla
Supervisory Patent Examiner, Art Unit 1700